SYSTEM DESCRIPTION

HLT-EP30 Laser Marker

1. PICTURE OF HLT-EP30 LASER MARKER

HLT-EP30 End-pumped Laser Marker mainly consists of laser optical girder, main control cabinet and lifting mechanism. The lifting mechanism is optionally configured based on different height of marking. For online marking, the corresponding photoelectric detector and speed measurement device should be additionally configured according to actual application conditions.

Standardly-configured HLT-EP30 Laser Marker

2. HLT-EP30 TECHNICAL PARAMETERS

➢ Laser output power: ≤25W

➢ Laser wavelength: 266~355nm

➢ Laser repetition frequency: 20-80KHz

- Marking range: 100mm×100mm
- Marking depth: ≤0.4mm
- Marking linear speed: ≤7000mm/s
- Min. line width: 0.05mm
- Min. character: 0.3mm
- Repeatability: ±0.003mm
- Total power: ≤3KW

3. HLT-EP30 STANDARD CONFIGURATION

No.	Part name	Model & specification	Qty.	Unit	Place of origin and manufacturer
1	Laser	DRACO-31D30	1	Set	Han's Laser
2	Galvanometer scanner system	10mm	1	Set	Germany, SCANLAB
3	Focusing lens	F=160	1	Set	Han's Laser
4	Marking control card	EMCC3200	1	Piece	Han's Laser
5	Software	Han's Laser Marking Control Software	1	Set	Han's Laser
6	Industrial PC	Dual-core, 1.8G or more	1	Set	China
7	Display	15" LCD	1	Set	China

4. HLT-EP30 CHARACTERISTICS

- Han's Laser self-developed diode end-pumped laser, dedicated for marking of plastic products.
- Imported galvanometer scanner system, fast speed and high stability.
- Modularized control cabinet, high stability and easy to install and operate.
- Operation via mouse and keyboard, in combination with LCD display.

➢ Standard WAN, COM and USB interfaces (one for each). If necessary, the interfaces can be extended from the industrial PC so as to satisfy the customer's data communication and other extension requirements.

➢ Fully-enclosed optical system, protecting optical elements against external environment.

➢ Robust and light lifting mechanism, adjustable in height and horizontal positions in given range.

➢ Different professional photoelectric detectors available to be selected by the customer according to features of products, able to realize non-interval marking, without missing any marking positions.

➢ Reserved rotary encoder interface (ENCODER); allowed to be equipped with speed measurement device to perform real-time speed measurement, thereby ensuring marking effect.

5. INTRODUCTION TO FLYING MARKING SOFTWARE

HLT-EP30 adopts Han's Laser self-developed flying marking control software. The software is based on WINDOWS XP operating platform, easy to operate and upgrade; it is suitable for rapid marking of production line and has the following features:

➢ User-friendly GUI, easy to operate and learn; perfect graphic processing functions, such as, generation of graphics, graphic movement, zoom in/out, rotation, mirror, copy, delete functions and so on.

➢ Enhanced text typesetting function, supporting TTF and SHX font libraries, supporting file import in multiple formats, e.g. BMP graphics, and PLT and DXF files generated by CorelDraw and AutoCAD.

➢ Automatic serial number marking; font, size, spacing, italic, arc arrangement of characters can be arbitrarily set.

➢ Providing the most convenient and accurate calibration method,

compensating error resulting from installation of galvanometer scanner.

➢ Convenient and considerate intelligent control interfaces can be flexibly connected with various automation equipment and sensors.

➢ Software functions can be customized based on customer's specific requirements.

6. WORKING ENVIRONMENT REQUIREMENTS

➢ Ambient temperature should be 5℃-40℃.

➢ Humidity is required to be 40%-80%.

➢ Power supply requirement: 220V, 50Hz.

➢ Power supply fluctuation should be ±5% and grounding wires should comply with international standards. In the regions with voltage amplitude over 5%, automatic voltage-stabilizing and current-stabilizing devices should be installed.

➢ The machine should not be installed in places with strong electromagnetic signal interference or near radio station (or relay station).

➢ Foundation amplitude should be less than 50um and vibration acceleration less than 0.05g, with no machine tools such as large punching machines nearby.

➢ Working area must be smoke-free and dust-free, without dust or powder resulting from metal polishing or grinding.

➢ Atmospheric pressure should be 86kpa～106kpa.

➢ In certain conditions, anti-static floor should be installed to enhance shielding.